REMARKS

Applicant has rewritten claim 1 to incorporate the key elements of claims 4 and 5 and cancelled claims 4 and 5 to more clearly define the invention.

In the aforementioned Office Action, claim 1, 4-5 and 14 were rejected under 35 U.S.C. 102(e) as being anticipated by Lee (US 2003/0098839). In making that rejection, the Examiner stated:

> "Regarding claim 5, Lee discloses the signal preprocessor as described in claim 1. Lee also discloses wherein the detection of said character of input gray signal data includes the detection of different video systems, different frame rates, different images with different signal-to-noise ratios, different interfaces or user dependent parameters (Paragraph [1029] explains that the character could be a user input received from a keyboard or a button)."

The cited reference does disclose a liquid crystal device comprising a data gray signal modifier for receiving gray signals from a data gray signal source, and for outputting modification gray signals by considering gray signals of present and previous frames according to modification parameters.

The device of the invention includes a modification parameter unit, which receives parameters for determining how many modifications of the gray signal will be performed, selecting a Look-Up-Table (LUT), and changing compensation values of the selected LUT, and provides the same to the LUT selector. Those parameters are:

temperature data from a sensor for measuring the present temperature;

image quality selecting data according to the user's taste output from a keyboard or a button; and

environment data, i.e. whether the LCD displays static graphics or moving graphics.

The preferred embodiment of the citation makes a plurality of LUTs having compensation values by temperature to generate a data voltage, selects a LUT among the plurality of LUTs according to the present temperature of the LCD, and then performs a modification of data voltage based on the selected LUT. The method is based on the assumption that the modified voltage adaptively changes according to the temperature. To be more specific, the subject-matter of the citation uses the temperature as the parameter for considering the target pixel voltage of the present frame and the pixel voltage of the previous frame, and it is difficult to be simply applied in the liquid crystal device to address the problem of noisy data.

Further, new claim 1 includes most of the features of previous claim 5 except the character that detects the user input parameters, which is the key point that the Examiner rejected the previous claim 5. Since there is no description about the character of the signal data modified by a user input in the amended claim 1, the new claim 1 is patentably distinguishable form the prior art by detecting different video systems, different frame rates, different images with different signal-to-noise ratios or different interface as the parameter rather than the temperature as the parameters in the citation. Accordingly, it is Applicant's contention that amended claim 1 and dependent claim 14 should be allowed.

After the amendment of the claims the layout and the function of the inventive gray signal modulator are different from those of the data gray signal modifier of the cited reference since the inventive preprocessor is designated to suppress noise induced from the input gray signal while the citation concerns a selection of modulated data only. Therefore, amended claim 1 and dependent claim 14 should be allowed.

Applicant's position is further supported by the Manual of Patenting Examining Procedure (MPEP) Sec. 2131. As stated therein:

> TO ANTICIPATE A CLAIM, THE REFERENCE MUST TEACH EVERY ELEMENT OF THE CLAIM
>
> "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference."

Since all of the claims are now in proper form and patentably distinguished over the cited art prompt favorable action is requested.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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